

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An electro-optical device of an active matrix comprising:

- a gate line provided over a substrate;
- a data line provided over said substrate;
- a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said gate line with an insulator therebetween and overlapping said wiring with an insulator therebetween; and

at least one transistor provided over said substrate and connected with said gate line at a gate thereof and connected with said data line at one of source and drain thereof and connected with said pixel electrode at the other one of the source and drain,

wherein a capacitance between said pixel electrode and said gate line and a capacitance between said pixel electrode and said wiring are the same as each other.

2. (Previously Presented) A device according to claim 1 wherein said wiring is another gate line provided over said substrate.

3. (Previously Presented) A device according to claim 1 wherein said wiring is in parallel with said gate line.

4. (Canceled)

5. (Previously Presented) An electro-optical device of an active matrix comprising:

- a gate line of n-th row provided over a substrate;
- a gate line of (n+1)-th row provided over said substrate;
- a gate line of (n+2)-th row provided over said substrate;
- a data line of m-th column provided over said substrate;

a pixel electrode of n-th row and m-th column provided over said substrate and connected with said data line and said gate line of n-th row through corresponding at least one transistor; said pixel electrode overlapping said gate line of (n+1)-th row with an insulator therebetween and overlapping said gate line of n-th row with an insulator therebetween; and

a pixel electrode of (n+1)-th row and m-th column provided over said substrate and connected with said data line and said gate line of (n+1)-th row through corresponding at least one transistor, said pixel electrode of (n+1)-th row and m-th column overlapping said gate line of (n+2)-th row with an insulator therebetween and overlapping said gate line of (n+1)-th row with an insulator therebetween,

wherein said pixel electrode of n-th row and m-th column is provided on an opposite side of said data line to said pixel electrode of (n+1)-th row and m-th column.

6. (Withdrawn) An electro-optical device of an active matrix comprising:

- a first gate line provided over a substrate;
- a first data line provided over said substrate;
- a second gate line provided over said substrate and adjacent to said first gate

line;

a second data line provided over said substrate and adjacent to said first data line; and

a pixel electrode provided over said substrate and connected with said first gate line and said first data line through at least one transistor, a gate thereof being connected with said first gate line and one of source and drain thereof being connected

with said first data line and the other one of the source and drain being connected with said pixel electrode,

wherein said pixel electrode has substantially the same shape of an area surrounded by said first data line and said second data line and said first gate line and said second gate line, and said pixel electrode is enclosed by said first data line and said second data line and said first gate line and said second gate line.

7. (Withdrawn) The device of claim 6 wherein said pixel electrode overlaps said first data line and said second data line and said first gate line and said second gate line to form capacitors, respectively.

8. (Withdrawn) The device of claim 7 wherein the capacitor formed by said pixel electrode and said first data line and the capacitor formed by said pixel electrode and said second data line have capacitances smaller than those of the capacitor formed by said pixel electrode and said first gate line and the capacitor formed by said pixel electrode and said second gate line.

9.-20. (Canceled)

21. (Previously Presented) An electro-optical device of an active matrix comprising:

a first pixel electrode formed over a first gate line with an insulator therebetween wherein said first gate line is provided over a substrate;

a second pixel electrode formed over a second gate line with said insulator therebetween, said second pixel electrode being formed adjacent to said first pixel electrode, wherein said second gate line is provided over said substrate;

a data line provided over said substrate;

a wiring provided over said substrate, said wiring being formed between said first and second gate lines and being formed under said first pixel electrode with said insulator therebetween; and

at least one transistor provided over said substrate and connected with said first gate line at a gate thereof and connected with said data line at one of source and drain thereof and connected with said first pixel electrode at the other one of the source and drain,

wherein a first capacitance between said first pixel electrode and said first gate line and a second capacitance between said first pixel electrode and said exclusive wiring are the same as each other.

22. (Previously Presented) An electro-optical device of an active matrix comprising:

a first gate line provided over a substrate;

a second gate line provided adjacent to said first gate line over said substrate;

a first pixel electrode provided over said substrate and connected with said first gate line through at least one first transistor; and

a second pixel electrode provided over said substrate and connected with said second gate line through at least one second transistor,

wherein said first pixel electrode overlaps said first gate line with an insulator therebetween and overlaps said second gate line with another insulator therebetween, and

wherein a difference between an area shared by said first gate line and said first pixel electrode and an area shared by said second gate line and said first pixel electrode is not more than one tenth of sum of said area shared by said first gate line and said first pixel electrode and said area shared by said second gate line and said first pixel electrode.

23.-24. (Canceled)

25. (Previously Presented) An electro-optical device of an active matrix comprising:

- a gate line provided over a substrate;

- a data line provided over said substrate;

- a wiring provided over said substrate;

- a pixel electrode provided over said substrate, overlapping said gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween;

and

- at least one transistor provided over said substrate,

- wherein a gate of said transistor is electrically connected with said gate line,

- wherein one of source and drain of said transistor is electrically connected with said data line,

- wherein the other one of said source and said drain of transistor is electrically connected with said pixel electrode,

- wherein said thin film transistor comprises a channel forming region comprising amorphous silicon,

- wherein a first signal is applied to said gate line,

- wherein a second signal is applied to said wiring, and

- wherein said second signal has an opposite polarity to said first signal.

26. (Previously Presented) A device according to claim 25 wherein said second signal applied to said wiring has the same magnitude of voltage as said first signal applied to said gate line.

27. (Previously Presented) A device according to claim 25 wherein said second signal is synchronized with said first signal.

28. (Previously Presented) An electro-optical device of an active matrix comprising:

- a gate line provided over a substrate;
- a data line provided over said substrate;
- a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

- at least one transistor provided over said substrate,
- wherein a gate of said transistor is electrically connected with said gate line,
- wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode, and

wherein said thin film transistor comprises a channel forming region comprising amorphous silicon.

29. (Previously Presented) An electro-optical device of an active matrix comprising:

- a first gate line provided over a substrate;
- a data line provided over said substrate;
- a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

- at least one transistor provided over said substrate,
- wherein a gate of said transistor is electrically connected with said first gate line,

wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode, and

wherein said wiring is a second gate line.

30. (Previously Presented) An electro-optical device of an active matrix comprising:

a gate line provided over a substrate;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,

wherein a gate of said transistor is electrically connected with said gate line,

wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode, and

wherein said pixel electrode comprises indium tin oxide.

31. (Previously Presented) An electro-optical device of an active matrix comprising:

a first gate line provided over a substrate;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,
wherein a gate of said transistor is electrically connected with said first gate line,
wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

wherein said thin film transistor comprises a channel forming region comprising amorphous silicon, and

wherein said wiring is a second gate line.

32. (Previously Presented) An electro-optical device of an active matrix comprising:

a gate line provided over a substrate;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,
wherein a gate of said transistor is electrically connected with said gate line,
wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

wherein said thin film transistor comprises a channel forming region comprising amorphous silicon, and
wherein said pixel electrode comprises indium tin oxide.

33. (Previously Presented) An electro-optical device of an active matrix comprising:

- a first gate line provided over a substrate;

- a data line provided over said substrate;

- a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

- at least one transistor provided over said substrate,

- wherein a gate of said transistor is electrically connected with said first gate line,

- wherein one of source and drain of said transistor is electrically connected with said data line,

- wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

- wherein said wiring is a second gate line, and

- wherein said pixel electrode comprises indium tin oxide.

34. (Previously Presented) An electro-optical device of an active matrix comprising:

- a first gate line provided over a substrate;

- a data line provided over said substrate;

- a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,
wherein a gate of said transistor is electrically connected with said first gate line,
wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

wherein said thin film transistor comprises a channel forming region comprising amorphous silicon,

wherein said wiring is a second gate line, and

wherein said pixel electrode comprises indium tin oxide.

35. (Previously Presented) An electro-optical device of an active matrix comprising:

a first gate line provided over a substrate;

a second gate line provided over a substrate adjacent to said first gate line;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,

wherein a gate of said transistor is electrically connected with said first gate line,

wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode, and

wherein said second gate line does not overlap said pixel electrode.

36. (Previously Presented) An electro-optical device of an active matrix comprising:

a first gate line provided over a substrate;

a second gate line provided over a substrate adjacent to said first gate line;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,

wherein a gate of said transistor is electrically connected with said first gate line,

wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

wherein said thin film transistor comprises a channel forming region comprising amorphous silicon, and

wherein said second gate line does not overlap said pixel electrode.

37. (Previously Presented) An electro-optical device of an active matrix comprising:

a first gate line provided over a substrate;

a second gate line provided over a substrate adjacent to said first gate line;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,

wherein a gate of said transistor is electrically connected with said first gate line,

wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

wherein said pixel electrode comprises indium tin oxide, and

wherein said second gate line does not overlap said pixel electrode.

38. (Previously Presented) An electro-optical device of an active matrix comprising:

a first gate line provided over a substrate;

a second gate line provided over a substrate adjacent to said first gate line;

a data line provided over said substrate;

a wiring provided over said substrate;

a pixel electrode provided over said substrate, overlapping said first gate line with an insulator therebetween, and overlapping said wiring with said insulator therebetween; and

at least one transistor provided over said substrate,

wherein a gate of said transistor is electrically connected with said first gate line,

wherein one of source and drain of said transistor is electrically connected with said data line,

wherein the other one of said source and said drain of said transistor is electrically connected with said pixel electrode,

wherein said thin film transistor comprises a channel forming region comprising amorphous silicon,

wherein said pixel electrode comprises indium tin oxide, and

wherein said second gate line does not overlap said pixel electrode.

39. (Previously Presented) An electro-optical device of an active matrix according to claim 28 wherein said insulator is an insulating flattening film.

40. (Previously Presented) An electro-optical device of an active matrix according to claim 29 wherein said insulator is an insulating flattening film.

41. (Previously Presented) An electro-optical device of an active matrix according to claim 30 wherein said insulator is an insulating flattening film.

42. (Previously Presented) An electro-optical device of an active matrix according to claim 31 wherein said insulator is an insulating flattening film.

43. (Previously Presented) An electro-optical device of an active matrix according to claim 32 wherein said insulator is an insulating flattening film.

44. (Previously Presented) An electro-optical device of an active matrix according to claim 33 wherein said insulator is an insulating flattening film.

45. (Previously Presented) An electro-optical device of an active matrix according to claim 34 wherein said insulator is an insulating flattening film.

46. (Previously Presented) An electro-optical device of an active matrix according to claim 35 wherein said insulator is an insulating flattening film.

47. (Previously Presented) An electro-optical device of an active matrix according to claim 36 wherein said insulator is an insulating flattening film.

48. (Previously Presented) An electro-optical device of an active matrix according to claim 37 wherein said insulator is an insulating flattening film.

49. (Previously Presented) An electro-optical device of an active matrix according to claim 38 wherein said insulator is an insulating flattening film.